Mounting structure of BGA type semiconductor device, has flexible intermediate connection layer extending horizontally towards IC chip, whose solder bumps are connected to electroconductive pattern of circuit board

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Novelty: The solder bumps (13) of the IC chip (12) are connected to electroconductive pattern (141) of circuit board. A flexible intermediate connection layer (14) extends horizontally towards the IC chip. The terminal electrode unit (142) is formed on the back side of circuit board (11) with respect to the main surface.

Use: For ball grid array (BGA), chip size package semiconductor device.

Advantage: Absorbs influence of stress due to difference of coefficient of thermal coefficient expansion of IC chip and circuit board, using intermediate connection layer. Offers highly reliable mounting structure without generation of crack.

Description of Drawing(s): The figure shows the sectional view of mounting structure of semiconductor device.

Circuit board 11
IC chip 12
Solder bump 13
Intermediate connection layer 14
Electroconductive pattern 141
Terminal electrode unit 142
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